# HEROIN:

Increased Use, Deadly Consequences

A Report from SENATOR JOSEPH R. BIDEN, JR. November 15, 1999

# Introduction By Senator Joseph R. Biden, Jr.

Recent results from the United States Department of Health and Human Services 1998 National Household Survey on Drug Abuse found that overall drug use rates have leveled off and youth drug use rates are on the decline. Despite the fact that this household-based survey often understates drug use because it does not capture hard-core addicts and it relies on self-reported data, the results are still good news. But parents and policy makers should not become complacent. The fact remains that one out of every ten kids aged 12 to 17 used an illicit drug in the past month.

Especially troubling is the rise in heroin use among young people. As America stands on the edge of the greatest population bulge since the 1960s of children entering their teens -- the years when children are most at risk of falling prey to drugs -- The University of Michigan's Monitoring the Future Survey records in 1997 the highest level of heroin use among high school seniors since the survey began in 1975. The average age of first heroin use has fallen from 18.3 years old in 1996 to 17.6 years old in 1998.<sup>1</sup> And in 1997, there were 141,000 new heroin users, most of whom were under age 26.<sup>2</sup>

It is no coincidence that the rise in heroin use among youth is happening as heroin purity levels are skyrocketing. When heroin was less potent, users had to inject the drug to get high. Now that heroin is up to 90

<sup>&</sup>lt;sup>1</sup> U.S. Department of Health and Human Services, National Household Survey on Drug Abuse, August, 1999.

<sup>&</sup>lt;sup>2</sup> Testimony of Donnie Marshall, Drug Enforcement Administration, before the House International Relations Committee, June 24, 1998.

percent pure in some cities, users can get high by smoking, snorting or inhaling the drug, making it much more attractive to teens and young adults. While "mainlining" heroin (injecting it into a vein) is perceived as something that only inner city "junkies" would do, "chasing the dragon" (inhaling heroin smoke) and snorting heroin have become acceptable among middle and upper-middle class kids at high school and college parties across the country.

No matter how heroin is taken, it is addictive and deadly. Just ask the families of any the 17 kids that have overdosed in Plano, Texas since 1994; the neighbors of the 16-year-old Lisle, Illinois boy who overdosed in his parents' home; the friends of Pamela Bouchard, the 29-year-old Nantucket, Massachusetts woman who overdosed in January; the classmates of 15-year-old Liam O'Hara of Westminster, Maryland who was a high school sophomore; the doctors who treated 18-year-old Kyle Walker of Carrollton, Texas when his friends dropped him at the hospital to die in July; the parents of 20-year-old Ian Katz of Norwalk, Connecticut who overdosed the same night he announced that he was ready to seek treatment; or Jerry and Marie Allen of Hockessin, Delaware whose 21-year old daughter Erin died after a hard-fought two year battle with heroin addiction that began when she first snorted the drug. Heroin is now more deadly than ever. We need to make sure that kids, parents, policy makers, teachers, clergy and role models know this.

The heroin problem never really went away, but as a nation we became focused for some time on the problem of cocaine use and the scourge of the crack epidemic. But now heroin use is capturing our attention once again. This report examines the rise of heroin use -- especially among young people -- in the United States, including the shifting dynamics of supply and demand as well as the latest science in heroin treatment. The report also makes recommendations about specific steps we can take

to address this re-emerging epidemic, steps that build on policies that have proven effective. I look forward to continuing to work with my colleagues to raise the profile on the drug problem in general -- and the heroin problem specifically -- to address this scourge on our nation's youth.

Senator Joseph R. Biden, Jr. November 15, 1999

# **Facts About Heroin Today**

The resurgence of heroin use and the toll it is taking on our society is clear:

- The Department of Health and Human Service's National Household Survey on Drug Abuse showed that the <u>number of heroin users</u> doubled between 1993 and 1998.
- According to the Department of Health and Human Service's Drug Abuse Warning Network which tracks <u>drug-related emergency room</u> <u>visits</u>, heroin- and morphine-related emergency department admissions increased 113 percent from 33,884 in 1990 to 72,010 in 1997. Heroin-related deaths increased 44 percent between 1992 and 1996 and were surpassed only by cocaine-related deaths.
- The Department of Health and Human Service's Drug Treatment Episode Data Set reveals that <u>drug treatment admissions</u> for heroin addiction increased 29 percent from 1992 to 1997 (from approximately 180,000 to 232,000). In 1997, about 16 percent of the 1.5 million treatment admissions were for heroin and opiate abuse compared to 15 percent for cocaine abuse. This is the first time since 1992 that heroin-related treatment admissions have out-paced admissions for cocaine abuse.
- Heroin seizures by law enforcement are up 52 percent from 1992 to 1997 (1,158 kilograms to 1,756 kilograms) according to the Drug Enforcement Administration's Federal Drug Seizure System.

 Heroin prices are falling. Researchers at the University of Chicago found that the amount of pure heroin that \$100 can buy tripled between 1988 and 1995.<sup>3</sup>

Heroin is not just a drug used by "junkies" in inner cities. As Philadelphia Police Chief Inspector Raymond J. Rooney has said:

"the stereotype of the heroin addict of the 1960s and 70s was an unemployed person sitting on the corner waiting for the dealer so they could get high. In 1999, we have people in suits and ties coming to get their heroin. They are from all races, all occupations."

Heroin is available in all fifty States and the District of Columbia and is spreading from large metropolitan areas to smaller cities, suburbs and rural areas. According to the National Drug Intelligence Center, its use has reached epidemic proportions in Delaware, Massachusetts and Maryland. Other states with serious heroin problems include: California, Colorado, Illinois, Louisiana, Michigan, New Jersey, Ohio, Oregon, Pennsylvania, Texas, Utah, Washington, and Wisconsin.<sup>5</sup> Americans consume about 13 metric tons of heroin each year at a cost of \$14.7 billion, not including the social costs that result from its use and abuse. For example, we spend \$400 million each year just to incarcerate new and repeat heroin-offenders.<sup>6</sup>

<sup>&</sup>lt;sup>3</sup> Peter B. Bach, MD, MAPP, and John Lantos, MD, "Methadone Dosing, Heroin Affordability, and the Severity of Addiction," *American Journal of Public Health*, May 1999.

<sup>&</sup>lt;sup>4</sup> Sudarsan Raghavan and Rose Ciotta, "Cheaper and Stronger, heroin finds new victims in suburbs," *Philadelphia Inquirer*, October 10, 1999.

<sup>&</sup>lt;sup>5</sup> National Drug Intelligence Center, *Heroin: Toward A National Threat Assessment*, March 1999, at v.

<sup>&</sup>lt;sup>6</sup> *Id*. at 9.

#### **Heroin and Kids**

Perhaps the most troubling aspect of the resurgence of heroin use is that more and more young people are using the drug. The average age of first heroin use fell from 18.3 years old in 1996 to 17.6 years old in 1998.<sup>7</sup> This is a dramatic change from the average age of 23 to 27 years old for first time use in the late 1980s and early 1990s.

According to the University of Michigan's 1998 Monitoring the Future survey, at least one in every 40 to 50 teenagers surveyed used heroin in the prior year. First time heroin use increased fourfold between the 1980s and 1995. Usage rates for high school dropouts, not captured by this school-based survey, are likely even higher.

In 1997, there were 141,000 new heroin users, most of whom were under age 26.8 Many of these younger users are from middle and upper-middle class backgrounds.9 A few snapshots from across the country illustrate this trend:

- **Delaware:** In New Castle County, there were 71 heroin-related overdoses, including 10 deaths, in the first half of 1999. Fifteen involved teenagers, the youngest of whom was 14.<sup>10</sup>
- Illinois: In Chicago, there has been an increase in young

U.S. Department of Health and Human Services, National Household Survey on Drug Abuse, August 1999.

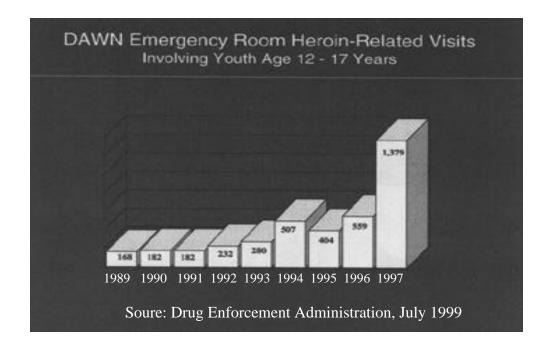
<sup>&</sup>lt;sup>8</sup> Testimony of Donnie Marshall, Drug Enforcement Administration, before the House International Relations Committee, June 24, 1998.

<sup>&</sup>lt;sup>9</sup> Office of National Drug Control Policy, *Pulse Check*, Winter 1998, at 1-2. [hereafter Pulse Check 1998]

<sup>&</sup>lt;sup>10</sup> Sudarsan Raghavan and Rose Ciotta, "Cheaper and Stronger, heroin finds new victims in suburbs," *Philadelphia Inquirer*, October 10, 1999.

users in the suburbs, female users and users from higher income socioeconomic groups.<sup>11</sup>

- Texas: In Austin, 25 percent of heroin users are young, white and middle to upper class. Just five years ago only one in ten users in Austin was under 25.<sup>12</sup>
- Maryland: Heroin is replacing cocaine as a drug of choice among white, middle class adolescents. In the Baltimore suburbs, 25 percent of teens admitted to drug treatment used heroin compared to 17 percent in inner city Baltimore.<sup>13</sup>
- Pennsylvania: In Haverford, a drug counselor reported that she gets an average of five calls a day from parents seeking treatment for their heroin-addicted kids. She says: "over the past four years, heroin has become more of a chic and in thing



<sup>&</sup>lt;sup>11</sup> Pulse Check 1998, at 2.

<sup>&</sup>lt;sup>12</sup> Pulse Check 1998, at 2.

<sup>&</sup>lt;sup>13</sup> Richard H. Schwartz, MD, "Adolescent Heroin Use: A Review," *American Academy of Pediatrics*, December 1998.

with the kids. People used to be afraid of heroin. They're not anymore."14

The consequences of teen heroin use can be seen in hospitals across the United States. The Drug Abuse Warning Network reports that heroin-related emergency room visits involving youth aged 12 to 17 increased 721 percent in less than ten years -- from 168 in 1989 to 1,379 in 1997. From 1995 to 1997 alone (the last two years for which data is available), there has been a 241 percent increase in heroin/morphine emergency room visits for this age group.

Teen heroin use has had disproportionately dire consequences for the town of Plano, Texas where between there have been 17 heroin-related fatalities and three near-fatalities since September 1994.<sup>15</sup> Most of the victims were under age 25.<sup>16</sup>

#### **What Heroin Does**

Heroin comes in two forms -- a powder, either white or brown in color, or a sticky tar-like substance known as "black tar." Most heroin is "cut" with adulterants or diluents such as sugar, powdered milk, quinine, or poisons such as strychnine. While it is impossible for street consumers to determine the contents or strength of the drug, on average, heroin purchased on the street today is purer than it was in the early 1990s. Increased purity means that users do not have to inject the drug to achieve a strong high. High purity heroin can be inhaled or snorted as well as injected. As a result, there is a lower "barrier to entry" for new users, especially teens, who may have been averse to "shooting up" the drug -- because of the stigma associated with intravenous drug use, fear of blood-

<sup>&</sup>lt;sup>14</sup> Sudarsan Raghavan and Rose Ciotta, "Cheaper and Stronger, heroin finds new victims in suburbs," *Philadelphia Inquirer*, October 10, 1999.

<sup>&</sup>lt;sup>15</sup> Drug Enforcement Administration, "Plano Heroin Task Force Report: Operation Chiva," at 1.

Staff communication with Cecilia Balzer, Drug Enforcement Administration, September 3, 1999.

borne diseases such as HIV, or fear of needles -- but are amenable to inhaling or snorting it.

To fully appreciate the highly addictive nature of heroin, it is useful to understand something about the chemistry of heroin in the human body. Heroin is the most rapidly acting of all the opiates. It binds to opioid receptors in the brain, causing the user to feel a "rush" or a burst of pleasure. Short-term effects of heroin use can include: slurred speech, depressed respiration, constipation, decreased appetite, irregular heartbeat, decreased sexual pleasure, clouded mental functioning, nausea and vomiting, suppression of pain, and spontaneous abortion for pregnant users.<sup>17</sup> There is no such thing as "casual" heroin use. Because the drug enters the brain so quickly, there is rapid onset of addiction. Users must increase the amount they take in order to sustain the pleasurable feelings associated with heroin use over time, thereby accelerating the onset of addiction.<sup>18</sup>

Thus, the consequences of heroin use are serious. While users may begin by smoking or snorting, many progress to intravenous use in order to achieve a "high" more quickly. Intravenous users are at an increased risk of contracting HIV and other infectious diseases such as hepatitis B and C. HIV is spread through the use of contaminated needles and other paraphernalia, as well as by unprotected sex with other infected intravenous drug users. According to the National Institute on Drug Abuse, "drug abuse is the fastest growing vector for spread of HIV." The hepatitis C virus -- carried by at least 2.7 million people in the United States -- is now the most common blood-borne illness in this country. It is a leading cause

<sup>&</sup>lt;sup>17</sup> National Institute on Drug Abuse, *Heroin Abuse and Addiction*, at 3.

<sup>&</sup>lt;sup>18</sup> Testimony of Donnie Marshall, Drug Enforcement Administration, before the House International Relations Committee, June 24, 1998.

<sup>&</sup>lt;sup>19</sup> National Institute on Drug Abuse, *Heroin Abuse and Addiction*, at 4.

of liver disease including cirrhosis and liver cancer.

# **History of Heroin Use in the United States**

Drugs like heroin and morphine have been a part of life in the United States throughout our history. Prior to 1800, opium was used to treat cholera, food poisoning, parasites and other gastrointestinal problems.<sup>20</sup> Morphine grew in popularity as a painkiller and as an abusable substance, especially as the hypodermic needle came into use in the United States shortly before the Civil War, allowing users to inject the drug directly into the blood stream.

The annual per capita importation of crude opium increased by more than fourfold between the 1840s and the 1890s and finally peaked in 1896.<sup>21</sup> In fact, by 1860, opium addiction had become such a problem that Oliver Wendell Holmes, Sr., then dean of Harvard Medical School, declared that in the western United States

"the constant prescription of opiates by certain physicians...has rendered the habitual use of that drug in that region very prevalent....A frightful endemic demoralization betrays itself in the frequency with which the haggard features and drooping shoulders of the opium drunkards are met with in the street."<sup>22</sup>

Heroin was first synthesized from morphine in 1874 and was registered as a trademark of the Bayer corporation in 1898 -- two years before that company registered a trademark for aspirin -- and heroin was marketed as a cough medication. Heroin was a legal drug in the United

<sup>&</sup>lt;sup>20</sup> David F. Musto, *The American Disease: Origins of Narcotics Control* (New York: Oxford University Press, 1999), at 1.

<sup>&</sup>lt;sup>21</sup> *Id.* at 3.

<sup>&</sup>lt;sup>22</sup> *Id.* at 4.

States until the passage of the Harrison Narcotic Control Act of 1914 (P.L. 63-223) which regulated and taxed narcotics and licensed those prescribing them. It served as the primary drug control statute until the passage of the Controlled Substances Act (P.L. 91-513) in 1970.<sup>23</sup>

# **Heroin: Supply Shifts**

Between 1967 and 1971, heroin flowed into the United States through what was known as the "French Connection." Turkish opium, processed in French laboratories was funneled into this country and distributed by organized crime families in New York.<sup>24</sup> In time, the "French Connection" was shut down but the vacuum was soon filled by other opium-producing countries.

In the mid-1970s, Mexican traffickers were supplying low quality, low



<sup>&</sup>lt;sup>23</sup> David Teasley, "Drug Supply Control: Current Legislation," Congressional Research Service Issue Brief, October 14, 1999.

Testimony of Donnie Marshall, Drug Enforcement Administration, before the House International Relations Committee, June 24, 1998.

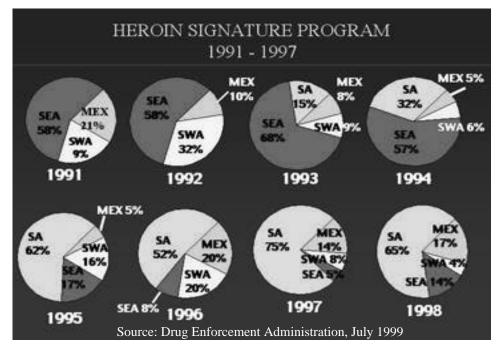
<sup>&</sup>lt;sup>25</sup> *Id*.

<sup>&</sup>lt;sup>26</sup> *Id*.

purity "Mexican mud" heroin to communities in the West and Midwest.<sup>25</sup> It was priced to undercut European suppliers.<sup>26</sup> By the mid 1980s, Mexico was the dominant source of heroin on the West Coast. The rest of the nation was getting its heroin from Southwest Asia and the Middle East (Pakistan, Afghanistan, Turkey and Lebanon) and Southeast Asia (Burma, Laos and Thailand). Southeast Asian heroin was dominant on the East Coast. Until South American heroin came on the scene in 1993, these three areas -- Mexico, Southeast Asia and Southwest Asia -- were the primary source regions for heroin in the United States.

The flow of white powder from Southeast Asia peaked in 1993 when it accounted for 68 percent of heroin in the United States. That same year, South America was the source of only 15 percent of the U.S. heroin supply. By 1997, 75 percent of heroin in the U.S. was coming from South American countries -- predominantly Colombia.

Data from the Drug Enforcement Administration's Signature Program, which analyzes the chemical makeup of seized drugs and develops a "signature" to identify drugs from each region, illustrate the dramatic supply

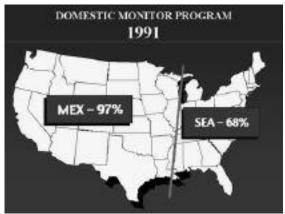


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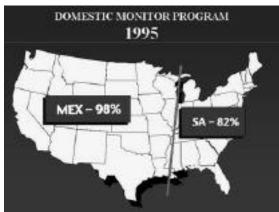
shift between 1991 and 1997:

# **Heroin Supply Today: Two Distinct Markets**

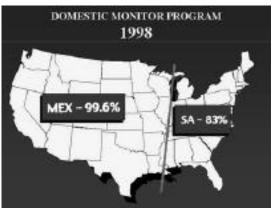
There are two distinct heroin markets in the United States -- South American white powder heroin east of the Mississippi River and Mexican black tar and brown powder heroin west of the Mississippi River.<sup>27</sup> Nearly 85 percent of identifiable heroin tested by the Drug Enforcement Administration in the East was from South America and almost 100 percent of identifiable heroin tested in the West was from Mexico.<sup>28</sup>



Source: Drug Enforcement Administration, July 1999



Source: Drug Enforcement Administration, July 1999



Source: Drug Enforcement Administration, July 1999

<sup>&</sup>lt;sup>27</sup> Drug Enforcement Administration, *The Heroin Situation in the United States*, September 1998, at 1.

<sup>&</sup>lt;sup>28</sup> Drug Enforcement Administration, Domestic Monitor Program Data, 1998.

#### South American Traffickers Infiltrate the Heroin Market

In 1993, Colombian heroin traffickers began to bring high purity heroin into the United States and sell it for low prices in order to infiltrate the market previously dominated by Southeast Asian traffickers.<sup>29</sup> According to the National Narcotics Intelligence Consumers Committee, "high purity was essential to establishing a clientele and maintaining user loyalty in the fiercely competitive U.S. heroin market. Consequently, Columbia-based traffickers smuggled heroin that commonly ranged between 80 and 95 percent pure."<sup>30</sup> In 1998, the average purity of South American heroin was higher than that from any other region.

According to the Drug Enforcement Administration's Signature program, South American heroin is quite similar to Southeast Asian heroin. Drug Enforcement Administration officials believe that South American heroin producers hired Southeast Asian chemists to "cook" the drug.<sup>31</sup> The chemical composition is therefore quite similar and appeals to users accustomed to Southeast Asian white powder.<sup>32</sup>

In the early 1990s, Colombian traffickers began offering their product at a competitive price -- almost half of the going rate for comparable heroin from Southeast and Southwest Asia.<sup>33</sup> Colombian traffickers let wholesalers have large quantities of heroin on consignment and they forced their cocaine wholesalers to begin dealing in heroin as well.<sup>34</sup> It is estimated that Colombia now produces six metric tons of heroin annually, most of which is destined for the United States.<sup>35</sup>

<sup>&</sup>lt;sup>29</sup> National Narcotics Intelligence Consumers Committee, *The Supply of Drugs to the United States*, November 1998, at 42.

<sup>&</sup>lt;sup>30</sup> *Id.* at 42.

<sup>&</sup>lt;sup>31</sup> Drug Enforcement Administration Briefing, "The Current Heroin Situation," July 26, 1999.

 $<sup>^{32}</sup>$  Id.

<sup>&</sup>lt;sup>33</sup> Testimony of Donnie Marshall, Drug Enforcement Administration, before the House International Relations Committee, June 24, 1998.

<sup>&</sup>lt;sup>34</sup> *Id*.

<sup>&</sup>lt;sup>35</sup> *Id*.

The Colombian heroin trade is controlled by a number of independent traffickers, most of whom are based in west central Colombia.<sup>36</sup> Couriers bring small amounts of the drug -- one to two kilograms per trip -- into the United States. While their operation is less established than that of the Colombian cocaine traffickers, it is quite versatile. For example, when Colombian heroin couriers were being caught at airports, the traffickers began employing Nigerians to transport one to five kilogram quantities of heroin into the United States using international mail.<sup>37</sup> Recently, Colombian traffickers sent \$1 million worth of heroin to Pompano Beach, Florida in the heels of 17 pairs of women's shoes.<sup>38</sup> They have also tapped into the extensive local distribution networks of Dominican gangs in the United States to get their product to retailers.<sup>39</sup> These gangs have begun to infiltrate areas previously untouched by serious heroin abuse such as Manchester, New Hampshire; Charlotte, North Carolina; and Charleston, West Virginia.<sup>40</sup>

In the Northeast, where South American heroin is predominant, "branding" -- the practice of affixing a brand name and logo to the heroin's glassine packaging -- is quite common.<sup>41</sup> This practice takes the traffickers efforts to establish clientele and maintain user loyalty down to the street level. Dealers establish brand loyalty primarily by providing high purity drug. In New York, brands such as *Stingray* and *Another High* are up to

<sup>&</sup>lt;sup>36</sup> *Id*.

<sup>&</sup>lt;sup>37</sup> *Id.* Nigerian traffickers are experienced in transporting and wholesale distribution of drugs. They have long been moving Southwest Asian heroin in to Europe and Southeast Asian heroin into the United States and Europe. It should be noted, however that the majority of couriers employed by Colombian traffickers are Colombian nationals.(Staff communication with Cecilia Balzer. Drug Enforcement Administration, August 25, 1999)

<sup>&</sup>lt;sup>38</sup> *Id*.

<sup>&</sup>lt;sup>39</sup> *Id*.

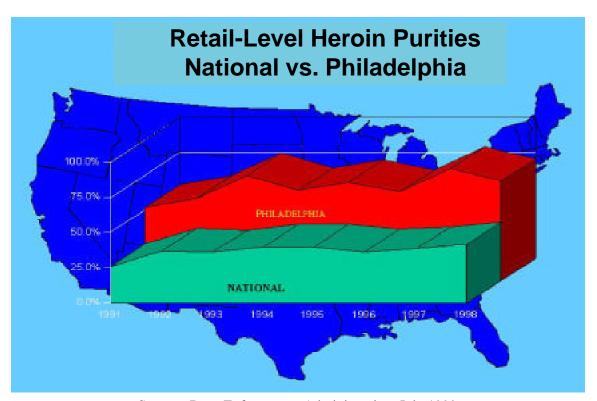
<sup>&</sup>lt;sup>40</sup> *Id*.

<sup>&</sup>lt;sup>41</sup> Drug Enforcement Administration, *Heroin: It Never Went Away*, Drug Enforcement Administration Heroin Conference, February 1997, at 14.

96% and 94.8% pure respectively.<sup>42</sup> Branding is less popular in other regions of the United States.<sup>43</sup>

# **Heroin Price and Purity**

Using established drug-distribution networks, Colombian drug traffickers have been bringing high quality South American heroin into the United States that is up to 90 percent pure and competitively priced.<sup>44</sup> In 1998, the average purity of South American heroin was 53 percent, higher than heroin from any other source. In comparison, Southeast Asian heroin was 37 percent pure; Mexican heroin was 32 percent pure; heroin from Southwest Asia was 33 percent pure. Purity is highest in Northeast



Source: Drug Enforcement Administration, July 1999

<sup>&</sup>lt;sup>42</sup> *Id.* at 14.

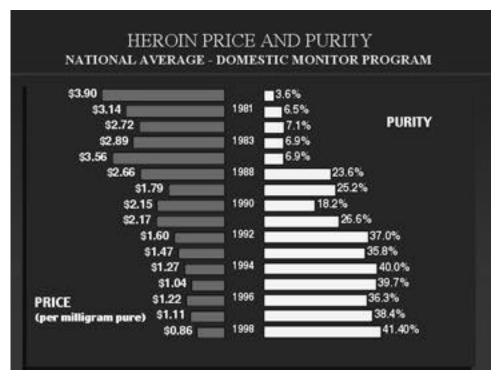
<sup>&</sup>lt;sup>43</sup> *Id.* at 15-17.

<sup>&</sup>lt;sup>44</sup> General Accounting Office, *Drug Control: DEA's Strategies and Operations in the 1990s*, July 1999, p. 19.

cities: Philadelphia, 79.5 percent; Newark, 68.6 percent; Boston, 66.4 percent; New York City, 62.5 percent. It is not uncommon, however, to find heroin that is more than 90 percent pure in some of these cities.<sup>45</sup>

Mexican heroin purity has been increasing as the Mexican heroin importers try to stay competitive against the South American heroin traffickers. There are now reports of some Colombian cookers passing their recipes and techniques to Mexican traffickers, teaching them to convert Mexican opium base into white powder heroin.<sup>46</sup>

The black tar heroin that was associated with the rash of deaths in Plano, Texas was 30 to 60 percent pure and was processed into a snortable powder form. Black tar heroin is most often dissolved, diluted and



Source: Drug Enforcement Administration, July 1999

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<sup>&</sup>lt;sup>45</sup> Drug Enforcement Administration, Domestic Monitoring Program Data, 1998.

<sup>&</sup>lt;sup>46</sup> Drug Enforcement Administration, *The Heroin Situation in the United States*, September 1998, at 4.

injected.<sup>47</sup>The Mexican "cookers" skip the chemical treatments and purifying steps that South American and Southeast Asian producers use to get pure white powder. In the case of Plano, however, dealers processed the heroin so that it could be snorted and therefore more appealing to their targeted youth market. Dealers froze the heroin to solidify it, dehydrated it in a microwave and ground it into a snortable powder form.<sup>48</sup>

While purity levels continue to climb, the price of heroin is on the decline. As the following graph illustrates, in 1980 heroin was 3.6 percent pure on average and a pure milligram cost \$3.90. By 1998, heroin was 41.7 percent pure on average and a pure milligram cost only \$0.85. A recent study concluded that the amount of pure heroin that \$100 could buy tripled between 1988 and 1995.<sup>49</sup>

## **Methods of Heroin Use**

As mentioned earlier, heroin comes in two forms -- a powder, either white or brown in color, or a sticky tar-like substance and purity levels are on the rise. Because high purity heroin can be inhaled or snorted as well as injected, new users, especially teenagers, are inhaling or snorting it and are under the false impression that heroin is not addictive unless injected.

Heroin can be smoked in a bong or a pipe, mixed with marijuana or tobacco. It can be inhaled in smoke form through a straw (known as "chasing the dragon") or snorted like powder cocaine into the nose. In San Antonio, Texas, some users are "shebanging," or dissolving sticky Mexican black tar heroin in water (making a substance known as "monkey juice" 50)

<sup>&</sup>lt;sup>47</sup> Drug Enforcement Administration, *Drugs of Abuse*, 1997, at 13.

<sup>&</sup>lt;sup>48</sup> Staff communication with Cecilia Balzer, Drug Enforcement Administration, September 3, 1999.

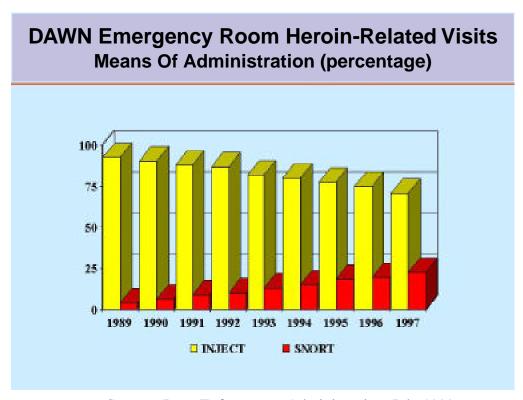
<sup>&</sup>lt;sup>49</sup> Peter B. Bach, MD, MAPP, and John Lantos, MD, "Methadone Dosing, Heroin Affordability, and the Severity of Addiction," American Journal of Public Health, May 1999.

Texas Commission on Alcohol and Drug Abuse, "Substance Abuse Trends in Texas," June 1999, p. 11.

and squirting it into their noses.51

A user will feel euphoric within 7 to 8 seconds after intravenous injection (known as "mainlining"); 5 to 8 minutes after intramuscular injection; 10 to 15 minutes after sniffing or smoking<sup>52</sup> and 15 minutes after subcutaneous injection (known as "skin popping").<sup>53</sup> A heroin high can last three to six hours.<sup>54</sup>

While injection is still the dominant route for taking heroin, data from the Drug Abuse Warning Network show that heroin snorting is on the rise:



Source: Drug Enforcement Administration, July 1999

<sup>&</sup>lt;sup>51</sup> Pulse Check 1998 at 2.

<sup>&</sup>lt;sup>52</sup> National Institute on Drug Abuse, *Heroin Abuse and Addiction*.

<sup>&</sup>lt;sup>53</sup> Richard H. Schwartz, "Adolescent Heroin Use: A Review," *American Academy of Pediatrics*, December 1998.

<sup>&</sup>lt;sup>54</sup> Drug Enforcement Administration, *Controlled Substances Uses and Effects*.

The percentage of heroin users who have smoked or snorted the drug increased from 55 percent in 1994 to 71 percent in 1997.<sup>55</sup> Dr. H. Westley Clark, Director of the Center for Substance Abuse Treatment, a division of the U.S. Department of Health and Human Services, has emphasized the danger of heroin, regardless of how it is taken: "Snorting and smoking was something that people could accept as less dangerous: 'You can't get hooked; it's not as bad.' A number of individuals are realizing that is not the case."56 In fact, researchers in Texas have found that, on average, those who inhale heroin are admitted to treatment nine months after first regular use of the drug compared to 13 months for injectors, indicating that inhaling may be more addictive than injecting.<sup>58</sup> The same study found that approximately 40 percent of adolescents who inhale heroin move to injecting after just four to eight weeks.<sup>59</sup> Dr. Alan Neaigus of the National Development and Research Institutes has studied the transition from snorting to injecting heroin and has come to the conclusion that "becoming a drug injector is not inevitable for heroin snorters who have never injected drugs, but the risk of making the transition is fairly substantial."60

Because of its high purity levels, it is mostly South American white powder heroin that is snorted. Mexican black tar heroin is generally of a lower purity, but can be mixed with prescription narcotics to make it more potent.<sup>61</sup> Because of its consistency and purity, black tar heroin is most

<sup>&</sup>lt;sup>55</sup> Office of National Drug Control Policy, *National Drug Strategy 1999*, at 30.

Laura Meckler, "More Seek Help for Heroin Abuse Than Cocaine Report Says," *News Journal*, August 26, 1999.

Texas Commission on Alcohol and Drug Abuse, "Substance Abuse Trends in Texas," June 1999, at 8.

<sup>&</sup>lt;sup>59</sup> *Id.* at 11.

<sup>&</sup>lt;sup>60</sup> Robert Mathias, "Heroin Snorters Risk Transition to Injection Drug Use and Infectious Disease," *NIDA Notes*, Volume 14, Number 2.

National Narcotics Intelligence Consumers Committee, *The Supply of Illicit Drugs in the United States*, November 1998, at 44.

often injected.<sup>62</sup> As described earlier, it can also be processed into a powder suitable for snorting or a liquid that can be sprayed into the nose.

Heroin use has increased among those who were already using the drug, as well as those who were abusing other drugs. Heroin became popular with crack users seeking to enhance the crack high and soften the crash associated with crack withdrawal (known as "speedballing"). "Speedballing" is combination drug use, i.e., a conscious use of two drugs to create a desired effect, rather than concurrent use of two drugs that is not intended to create a unique effect.<sup>63</sup>

#### **Need for treatment**

The estimated 13 million current users of illicit drugs in the United States exact an economic cost to society of over \$110 billion annually.<sup>64</sup> A cost-benefit analysis of treatment services in California demonstrated that the benefit of treatment outweighed taxpayer costs by seven to one over two years.<sup>65</sup> And treatment is effective. One study found that after one year of treatment, 52 percent of women were drug free, less likely to be arrested and more likely to be employed.<sup>66</sup>

National Institute on Drug Abuse and National Institute on Alcohol Abuse and Alcoholism, The Economic Costs of Alcohol and Drug Abuse in the United States, 1992, September 1998.

<sup>&</sup>lt;sup>62</sup> Drug Enforcement Administration, Drugs of Abuse, 1997, at 13.

<sup>63</sup> Pulse Check 1998, at 4.

<sup>&</sup>lt;sup>65</sup> Radial, C.P., and Everingham, Susan S., *Controlling Cocaine: Supply versus Demand Programs*, Santa Monica, CA: RAND, 1994.

<sup>&</sup>lt;sup>66</sup> Center for Substance Abuse Treatment, *Producing Results: A Report to the Nation*, Washington, DC: US Department of Health and Human Services, 1998.

Less than half of the estimated 4.4 to 5.3 million people in the United States who need drug treatment are receiving it. In 1997, for the first time in five years, the number of treatment center admissions for heroin addiction out-paced the number of treatment center admissions for cocaine. Heroin admissions increased 29 percent from 180,000 in 1992 to 232,000 in 1997 while cocaine admissions fell 17 percent from 267,000 in 1992 to 222,000 in 1997.<sup>67</sup> Of the 810,000 chronic heroin users,<sup>68</sup> only 179,000 are receiving pharmacotherapy treatment such as methadone maintenance therapy.<sup>69</sup> For every dollar spent on methadone maintenance therapy, there is a four dollar economic benefit, meaning that there is a 4:1 cost-benefit ratio for methadone treatment.<sup>70</sup> In November 1997, the National Institutes of Health Consensus Development Conference on "Effective Medical Treatment of Heroin Addiction" recommended that:

- all opiate-dependent individuals in the criminal justice system should have access to methadone treatment,
- federal and state methadone regulations should be reduced, and
- public and private insurance programs should cover methadone maintenance therapy.

The Office of National Drug Control Policy, under the leadership of General Barry R. McCaffrey, has been working to revamp the federal regulations governing treatment programs using methadone and other medications to treat opiate addiction. Along with the Substance Abuse and

<sup>&</sup>lt;sup>67</sup> Substance Abuse and Mental Health Services Administration, *Treatment Episode Data Sets 1992-1997: National Admissions to Treatment Services*, August 1999.

<sup>&</sup>lt;sup>68</sup> Office of National Drug Control Policy, *National Drug Control Strategy 1999*, at 30.

<sup>&</sup>lt;sup>69</sup> American Methadone Treatment Association, Methadone Maintenance Provider Survey, 1998.

Harwood, et. al. *The Costs of Crime and the Benefits of Drug Abuse Treatment*, National Institute on Drug Abuse Monograph Series 86, Department of Health and Human Services, 1998.

Mental Health Services Administration, General McCaffrey has spearheaded an effort to improve the quality and oversight of these treatment programs. The proposed regulations would do three things:<sup>71</sup>

- Move federal oversight responsibilities from the Food and Drug Administration to the Substance Abuse and Mental Health Services Administration in order to put more of a medical emphasis on the oversight process.
- Allow doctors and other health care providers to prescribe antiaddiction medications, rather than require those in treatment to pick up their doses each day at clinics.
- Move from a system of state or local certification of clinics to national accreditation to shift the focus from clinic rules to treatment outcomes.

These changes are expected to increase the quality of and the access to methadone maintenance treatment and similar medication-based therapies.

# **Types of Treatment**

The National Institute on Drug Abuse defines addiction as a "chronic, relapsing disease, characterized by compulsive drug seeking and use and by neurochemical and molecular changes in the brain." In other words, it is a medical disease and should be treated as such. Most treatment regimens begin with detoxification. There are a number of treatments for heroin addiction including both behavioral therapies and anti-addiction medications, the latter of which are known as pharmacotherapies.

Notice of Proposed Rulemaking, "Narcotics Drugs in Maintenance and Detoxification Treatment of Narcotic Dependence; Repeal of Current Regulations and Proposal to Adopt New Regulations," Federal Register, July 22, 1999.

#### **Detoxification and Withdrawal**

Detoxification is the process of ridding the body of drugs while managing withdrawal symptoms. Heroin withdrawal is characterized by watery eyes, runny nose, loss of appetite, irritability, tremors, panic, cramps, nausea, chills and sweating.<sup>72</sup> These symptoms start approximately eight hours after the last dose was taken,<sup>73</sup> peaking at 48 to 72 hours, and tapering off over the next four to seven days.<sup>74</sup>

Detoxification is an important first step in the treatment process but it is not treatment in itself. It should include a period for the patient to psychologically adjust to a sober life and prepare to enter treatment.<sup>75</sup> Ideally, detoxification should be part of a comprehensive treatment program.<sup>76</sup>

Addiction is a chronic disease and relapse is common. It often is necessary, therefore, for an individual to go through detoxification and treatment several times before remaining "clean" for an extended period. There are two types of detoxification programs -- medical model programs and social model programs. Medical model programs are run by physicians and staffed by health care professionals. Social model programs primarily provide psychosocial services including family and individual counseling. Some programs have the resources to prescribe detoxification medications, but more often these programs focus on managing withdrawal without medications.

<sup>&</sup>lt;sup>72</sup> Drug Enforcement Administration, Controlled Substances Uses and Effects

<sup>&</sup>lt;sup>73</sup> Richard H. Schwartz, "Adolescent Heroin Use: A Review," *American Academy of Pediatrics*, December 1998.

<sup>&</sup>lt;sup>74</sup> Id.

Department of Health and Human Services, "Detoxification from Alcohol and Other Drugs, Treatment Improvement Protocol Series 19, 1995.

<sup>&</sup>lt;sup>76</sup> *Id*.

<sup>&</sup>lt;sup>77</sup> *Id*.

<sup>&</sup>lt;sup>78</sup> *Id*.

Detoxification may be done on an inpatient or outpatient basis. In an inpatient setting, there is restricted access to abusive substances, withdrawal symptoms may be more carefully monitored, and detoxification can often be accomplished more quickly.<sup>79</sup> In an outpatient setting, detoxification is significantly less expensive, the patient's day-to-day life is less disrupted, there is no adjustment associated with leaving an inpatient facility and returning home.<sup>80</sup>

# **Behavioral Therapy**

Behavioral therapy may be done alone or in combination with pharmacotherapy. There is no behavioral therapy that has yet been shown to be more effective for treatment of heroin addiction than methadone or methadone in combination with behavioral therapy, however.

Behavioral treatment focuses on learning new ways to cope with the environment and circumstances that the patient associates with substance abuse.<sup>81</sup> Patients learn new ways to react to circumstances where he or she is at high risk for using drugs. In this type of treatment, positive incentives or awards for good behavior have been found to be more effective than punishments or threats of negative consequences for undesirable behavior.<sup>82</sup>

Some patients also take part in individual or group psychotherapy. Whereas drug counseling focuses on external events, psychotherapy works to identify internal factors that contribute to substance use or interfere with the progress of treatment.<sup>83</sup> In addition, some patients

 $<sup>\</sup>overline{}^{79}$  *Id*.

<sup>&</sup>lt;sup>80</sup> Id.

<sup>&</sup>lt;sup>81</sup> Department of Health and Human Services, "Matching Treatment to Patients Needs in Opioid Substitution Therapy, Treatment Improvement Protocol Series 20," 1995.

<sup>&</sup>lt;sup>82</sup> *Id*.

<sup>&</sup>lt;sup>83</sup> *Id*.

undergo family therapy to address family problems that may contribute to or exacerbate substance abuse.<sup>84</sup>

# Pharmacotherapy

In 1965, Doctors Vincent Dole and Marie Nyswander discovered that methadone, a synthetic opiate created as a painkiller during World War II, could be used in the treatment of heroin addiction. Since that time, methadone has been used to safely and effectively treat heroin addicts. Methadone works by binding to the opiate receptors in the brain, blocking heroin craving without producing euphoria or making the patient "high."

Anti-addiction medications are heavily regulated by both state and federal authorities. All of the approved pharmacotherapy treatments have been classified as controlled substances and are therefore regulated by the Controlled Substances Act (P.L. 91-513) and the Narcotics Addict Treatment Act (P.L. 93-281) as well as the companion state laws.<sup>85</sup> Federal law establishes the minimum standards for regulation of anti-addiction medication; states may add additional regulatory layers.<sup>86</sup> Access to pharmacotherapy treatment is often restricted by local zoning regulations, inadequate public funds and lack of private insurance coverage for this type of treatment.<sup>87</sup>

 $<sup>^{84}</sup>$  Id

<sup>&</sup>lt;sup>85</sup> Institute of Medicine, "The Development of Medications for the Treatment of Opiate and Cocaine Addictions: Issues for the Government and Private Sector," National Academy Press, 1995, at 173.

<sup>86</sup> *Id.* at 173.

<sup>&</sup>lt;sup>87</sup> Letter from Health and Human Services Secretary Donna E. Shalala to House Commerce Committee Ranking Member Representative John Dingell, July 14, 1999.

**Methadone Maintenance Program and Patient Census, 1998** 

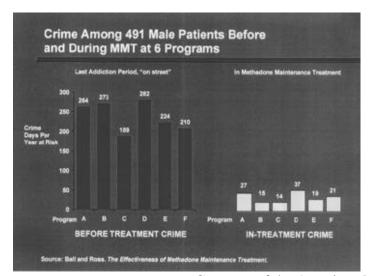
State	# Licensed Program Sites	#Patients	State	# Licensed Program Sites	#Patients
Alabama	16	2,500	Minnesota	6	1,005
Alaska	1	49	Missouri	9	1,009
Arizona	24	3,777	Nebraska	1	180
Arkansas	2	229	Nevada	7	1,450
California	145	29,027	New Jersey	28	9,925
Colorado	9	1,800	New Mexico	7	1,965
Connecticut	18	5,465	New York	126	44,000
Delaware	2	692	North Carolina	11	1,191
District of Columbia	5	2,500	Ohio	9	1,888
Florida	26	4,900	Oklahoma	3	500
Georgia	18	2,500	Oregon	10	2,600
Hawaii	2	600	Pennsylvania	28	6,005
Illinois	42	8,360	Rhode Island	8	1,950
Indiana	13	2,633	South Carolina	6	1,268
Iowa	2	325	Tennessee	5	1,360
Kansas	5	600	Texas	58	6,450
Kentucky	6	750	Utah	5	759
Louisiana	9	1,605	Virginia	7	1,050
Maine	2	283	Washington	10	2,551
Maryland	32	6,932	Wisconsin	9	1,320
Massachusetts	24	7,398	Wyoming*	1	3
Michigan	28	7,975			

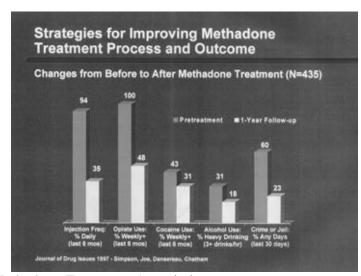
Source: American Methadone Treatment Association, April 1999 \* The program in Wyoming closed on February 26, 1999.

# Methadone Maintenance Treatment

There are currently 179,000 patients enrolled in the nation's 784 methadone maintenance programs.<sup>88</sup> Eight states -- Idaho, Mississippi, Montana, New Hampshire, North Dakota, South Dakota, Vermont and West Virginia -- do not provide treatment services using these anti-addiction medications.<sup>89</sup>

Patients in methadone maintenance therapy take their medication once a day, usually at a local clinic. When administered at the proper dose, methadone suppresses withdrawal symptoms for 24 hours without producing euphoria or causing the patient to become intoxicated or sedated. Most methadone patients receive counseling, other medical services and vocational skills or related services as part of their treatment. Some patients remain on methadone indefinitely, while others transition off of the anti-addiction medication after a period of time.





Courtesy of the American Methadone Treatment Association

<sup>&</sup>lt;sup>88</sup> American Methadone Treatment Association, Methadone Maintenance Provider Survey, 1998.

<sup>&</sup>lt;sup>89</sup> *Id*.

According to a National Institutes of Health panel of experts, "methadone treatment significantly lowers illicit opiate drug use, reduces opiate-related illness and death, reduces crime, and enhances social productivity." The panel recommends expanding access to this type of treatment by eliminating unnecessary layers of regulation and increasing funding.

In 1998, the General Accounting Office reported that methadone is "the most effective treatment for heroin addiction."<sup>90</sup> A recent study showed that methadone treatment decreases heroin use by 70 percent, decreases criminal activity by 57 percent and increases full-time employment by 24 percent.<sup>91</sup>

#### Methadone criticisms

Despite these impressive results, this form of treatment continues to be met with much resistance. The opposition to pharmacotherapy is partly due to the fact that some are unwilling to view addiction as a disease and would rather "treat" it with a prison term. Others, see it as replacing one addiction (heroin) with another (methadone, etc.). In July 1998, New York City Mayor Rudolph Giuliani proposed abolishing methadone maintenance programs for heroin addicts treated at any of the City's five public hospitals. He backed away from this proposal in January of 1999, however, and has since increased funding for city-run methadone programs. On February 11, 1999, Senator John McCain introduced a bill -- "The Addiction Free Treatment Act" -- to prohibit federal funding for any treatment program that maintains patients on methadone for more than six months. The bill's underlying premise is that "the Federal Government should adopt a zero-

<sup>&</sup>lt;sup>90</sup> General Accounting Office, "Drug Abuse: Research Shows Treatment is Effective but Benefits may be Overstated," March 27, 1999.

<sup>&</sup>lt;sup>91</sup> National Institute on Drug Abuse, Drug Abuse Treatment Outcomes Study (cited in ONDCP "Initiative on Methadone Treatment Fact Sheet).

tolerance, non-pharmacological policy that has as its defined objective independence from drug addiction."<sup>92</sup> Clearly there is resistance to the notion of a medical treatment for a disease that is still perceived as "self-inflicted." Many are inclined to believe that addicts can "cure" themselves if they had the will power and self-restraint to do so.

# Other Anti-Addiction Medications

Since the advent of methadone treatment, other anti-addiction medications have been developed. Most significant among these for treating heroin abuse are LAAM (Levo-alpha-acetyl-methadol), naloxone, naltrexone and buprenorphine.

### LAAM

Like methadone, LAAM is a synthetic opiate agonist, meaning that it binds to opiate receptors in the brain. Like methadone it is taken orally three times per week. Individuals treated with LAAM are therefore required to go to a clinic to get their medication less often than methadone patients (as stated earlier, a dose of methadone lasts up to 24 hours). Although LAAM was approved for use in 1993, only 279 clinics are currently using it to treat their patients.<sup>93</sup> And, it is estimated that only 2,000 patients are actually taking LAAM.<sup>94</sup> It took most states more than three years to approve LAAM after the Federal government had approved it and determined its safety. Further delaying its use, all clinics that wanted to use LAAM had to be individually approved by the relevant state authority.

<sup>93</sup> American Methadone Treatment Association, "Methadone Maintenance Provider Survey, 1998"

<sup>&</sup>lt;sup>92</sup>S.423, "The Addiction Free Treatment Act"

<sup>&</sup>lt;sup>94</sup> National Institute on Drug Abuse, "Buprenorphine Update: Questions and Answers"

## Naloxone and Naltrexone

Naloxone and naltrexone are opiate antagonists, meaning that they block the effects of opiates. They are therefore often used as "antidotes" in cases where an individual has overdosed on heroin. They are also used to treat certain highly motivated patients.

# **Buprenorphine**

Buprenorphine, a drug which is currently awaiting approval by the Food and Drug Administration, is a partial agonist, meaning that it stimulates opiate receptors in the brain but also blocks the effects of opiates. In other words, it can produce the effects associated with opiates (pain relief, euphoria, sedation and respiratory depression), but to a lesser degree than full agonists (such as heroin, morphine, LAAM or methadone). It is administered under the tongue.

Buprenorphine is not expected to replace methadone treatment. Rather, it will give doctors and patients additional treatment options. Buprenorphine is more effective than methadone at reducing heroin use, is taken daily, and has a lower risk of overdose or dependence than methadone. According to the National Institute on Drug Abuse, these properties make buprenorphine "undesirable for diversion to illicit use, especially when compared with other existing illegal and legal opiate products. Here is also a combination drug in development that will provide safeguards against diversion. This approach mixes buprenorphine with naloxone (known as "buprenorphine/nx") in patients' take home doses. If a heroin addict tries to get high off of the medication by injecting it, the naloxone would send the individual into withdrawal.

<sup>&</sup>lt;sup>95</sup> *Id*.

<sup>&</sup>lt;sup>96</sup> *Id*.

<sup>&</sup>lt;sup>97</sup> Staff communication with Dr. Frank J. Vocci, Director, Medications Development Division, National Institute on Drug Abuse.

The National Institute on Drug Abuse expects that buprenorphine could be used to treat heroin-dependent teens. <sup>98</sup> Currently, methadone is used infrequently to treat adolescents. Food and Drug Administration regulations restrict access to this type of treatment to adolescents who have had at least two documented attempts at short-term detoxification or drug-free treatment. <sup>99</sup> Because there is less risk of fatal overdose (due to the "ceiling" effect on respiratory depression) and the withdrawal effects are milder than those of methadone, the Department of Health and Human Services has stated, "buprenorphine and buprenorphine/nx may be appropriate for short-term treatment in adolescents." <sup>100</sup>

# A New Paradigm for Anti-Addiction Medications: "The Drug Addiction Treatment Act of 1999"

Recently introduced legislation, the "Drug Addiction Treatment Act of 1999" (S. 324),<sup>101</sup> would allow specially qualified doctors to dispense certain controlled substances such as buprenorphine or buprenorphine/nx from their offices to treat addiction. Health and Human Services Secretary Donna Shalala expressed her support for this concept when she remarked that "to consign new treatment medications, with enhanced safety and less diversion potential solely into the existing methadone clinic system would be a serious health mistake." She went on to say:

"S. 324 would permit incremental treatment expansion to proceed in a manner which is not overburdened by Federal, state and local requirements as is the case with methadone

<sup>&</sup>lt;sup>98</sup> *Id*.

<sup>&</sup>lt;sup>99</sup> 21 CFR part 291.505(d)(1)(iv)

<sup>&</sup>lt;sup>100</sup> Letter from Health and Human Services Secretary Donna E. Shalala to House Commerce Committee Ranking Member Representative John Dingell, July 14, 1999.

The bill is sponsored by Senators Biden, Hatch, Levin and Moynihan. Representative Thomas Bliley (R-VA) has introduced a companion measure in the House of Representatives which was reported out of the House Commerce Committee by voice vote on October 13, 1999.

<sup>&</sup>lt;sup>102</sup> Letter from Health and Human Services Secretary Donna E. Shalala to House Commerce Committee Ranking Member Representative John Dingell, July 14, 1999.

clinic regulation. This treatment expansion cannot occur if new anti-addiction drug products are only permitted to be dispensed through the existing methadone clinic system, because it is a limited and closed capacity system."103

The National Institute on Drug Abuse has made the point that "the failure of (LAAM) to make an appreciable impact under the more restrictive rules suggests that if buprenorphine is to make an appreciable impact on the 'treatment gap' it must be delivered under different rules and regulations."104

The Drug Addiction Treatment Act was passed out of the Senate Committee on the Judiciary unanimously on August 5, 1999 as part of a larger measure, "The Methamphetamine Anti-Proliferation Act of 1999." and passed the full Senate on November 10, 1999.

# **Next Steps**

Clearly heroin use is a growing problem - among adults and teens, in urban centers, small towns and rural areas. What do we do about it?

#### I. **Pharmacotherapy Research and Development**

One of the most critical steps to dealing with heroin addiction -- as well as cocaine, methamphetamine and other drug addictions -- is to find medical solutions to what becomes a medical problem when a person becomes addicted to drugs. We must encourage and support the development of medications that treat addiction itself.

<sup>&</sup>lt;sup>104</sup> National Institute on Drug Abuse, "Buprenorphine: Questions and Answers"

Ten years ago we asked the question, "If drug addiction is an epidemic, are we doing enough to find a medical 'cure'?" That led to the Pharmacotherapy Development Act --- which became law in 1992 -- to set about finding such a "cure." The cornerstone of this Act was its call for a ten-year, \$1 billion effort to research and develop anti-addiction medications. To begin this endeavor, Congress authorized \$85 million for Fiscal Year 1993 and \$95 million for Fiscal Year 1994. Congress has never appropriated funds for this specific purpose the Maional Institute on Drug Abuse must use money from its general research budget to fund the Medications Development Program. Competing funds for this research budget means that the money available for developing new addiction treatments is limited. Congress should fulfill its commitment to provide \$1 billion over ten years specifically for this purpose.

Anti-addiction medication is a worthwhile investment. There is no other disease that affects so many, directly and indirectly, as does addiction. We have 14 million drug users in this country, four million of whom are hard-core addicts. We all have a family member, neighbor, colleague or friend who found themselves or their children addicted to drugs. And, we are all affected by the clear connection between drug use and crime: an overwhelming 80 percent of the 1.8 million men and women behind bars today have a history of drug and alcohol abuse or addiction or were arrested for a drug-related crime. If we decrease drug use, we decrease crime -- it's simple arithmetic. And when fewer crimes are committed, we not only reap the benefits of safer streets and more secure lives, we save real dollars in what we would otherwise have spent to catch those addicts, keep them from committing more crimes, and putting them in jail.

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ADAMHA Reorganization Act Committee Report 102-131; "Pharmacotherapy: A strategy for the 1990's," Report of the Senate Judiciary Committee, December 13, 1989.

<sup>&</sup>lt;sup>107</sup> Staff communication with Mary Mayhew, Congressional Liaison, National Institute on Drug Abuse.

We need to find ways to unleash the tremendous powers of medical science to find a medical cure for this social and human ill. Regardless of the reasons that a person might become addicted, we need to face the fact that addiction -- like hypertension, diabetes and asthma -- is a chronic medical problem that requires and responds to medical solutions. Last year alone we invested almost \$3 billion in cancer research and \$1.6 billion in AIDS research.<sup>108</sup> No one argues that this money was not well spent. But in contrast, we have not yet made good on the \$1 billion investment over ten years to drug treatment research that we committed to in 1992. The time has come that we should, and that we do.

This approach is grounded in the facts. There are more than 50 promising medications to treat cocaine and heroin addiction currently in clinical trials, including Buprenorphine/Naloxone, Clonidine and Dextromethorphan for heroin addiction and Selegiline, Amantadine and Baclofen for cocaine addiction. We should invest in these treatments and work to develop more.

In addition to dedicating \$1 billion to the National Institute on Drug Abuse -- which supports more than 85 percent of the world's health-related research on drug abuse and addiction -- there are a number of ways to encourage private companies to engage voluntarily in pharmacotherapy development. A serious effort to promote anti-addiction medication development should be comprehensive, and we might consider some of the following innovative ideas:

Renew Efforts to Fully Fund The Medication Development
 Program. We should follow through on our commitment to invest \$1 billion in the next decade to foster the development of anti-addiction medications.

<sup>&</sup>lt;sup>108</sup> National Institutes of Health web site, Research Initiatives/Programs of Interest.

- Expedite the Food and Drug Administration's Approval Process.
  We should apply to research on pharmacotherapies some of the
  innovative procedures that the Food and Drug Administration
  developed to respond speedily to the AIDS epidemic, such as
  expediting approval processes for experimental drugs.
- Provide financial incentives. We could establish substantial
  financial incentives for companies that develop medications to treat
  addiction, but shift to the federal government responsibility for getting
  these medications to those who need them. This approach would
  create a financial incentive for drug companies to invest in research
  and development but enable them to avoid any stigma associated
  with distributing medicine to substance abusers.
- Allow Patent Extension for On-Market Drug. Allowing
  pharmaceutical companies that successfully develop an antiaddiction medication to extend market exclusivity of one of their onmarket drugs would provide a powerful financial incentive for large
  pharmaceutical companies to engage in this type of research.

# II. Expand Drug Courts: Breaking the Cycle of Addiction and Crime

The nation's primary response to the drug epidemic has been punishment. There are now 1.8 million people behind bars in this country, 80 percent of whom have a history of drug and alcohol abuse or are serving time for drug- and alcohol-related crimes. Clearly, simply locking people up has not solved the problem of drug-related crime.

Every hard-core addict must be faced with one of two stark choices, get into treatment or go to jail and get treatment there. In other words, the <u>certainty</u> of punishment is the most important aim of a criminal justice

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<sup>&</sup>lt;sup>109</sup> Senator Joseph R. Biden, Jr., "Fighting Drug Abuse: A National Strategy," January, 1990.

system's response to drug abuse. And, the "carrot" of drug treatment is not sufficient to change the behavior of the most hard-core addicts without the "stick" of sure and immediate punishment hanging over their heads as well.

In the 1994 Crime Law, Congress created drug courts as a costeffective, innovative way to deal with non-violent offenders in need of drug treatment. Though authorization for this program was repealed just two years later, Congress continued to fund this program. Pending legislation would reauthorize and strengthen the drug court program.<sup>110</sup>

Drug courts are as much about fighting crime as they are about reducing illegal drugs. Our nation has about 3.2 million offenders on probation today. They stay on probation for about two years. And throughout those two years, they are subject to little -- if any -- supervision. For example, almost 300,000 of these probationers had absolutely no contact with their probation officer in the past month -- not in person, not over the phone, not even through the mail.

Drug Courts fill this "supervision gap" with regular drug testing, with the individual actually coming before a judge twice a week and personally seeing a probation officer or treatment professional three times a week. In just five years, drug courts have taken off. There are currently 412 drug courts operating in all 50 states plus the District of Columbia, Guam, Puerto Rico and two federal districts. An additional 280 courts are being planned.

Since they were created five years ago, nearly 100,000 people have entered drug court programs and the results have been impressive. About 70 percent of the drug court program participants have either stayed in the

<sup>&</sup>lt;sup>110</sup> "The Drug Court Reathorization and Improvement Act," (S. 1808)was introduced by Senators Biden and Specter on October 27, 1999.

program or completed it successfully. That is more than twice the retention rate of most traditional treatment programs. The other 30 percent of the participants went to jail. That should be heralded as a success of the drug court program as well. Without drug courts, this 30 percent would have been unsupervised, unmonitored, and unless they happened to be unlucky enough to use drugs or commit a crime near a police officer, they would still be on the streets abusing drugs and committing crime. Drug courts provide the oversight to make sure that does not happen.

We currently spend \$40 million annually on drug courts. Congress should fully fund drug courts at the level that was called for in the 1994 Crime Law --- \$200 million. Drug courts are effective and cost effective. We should spend federal dollars wisely and invest in what works.

There are a number of jurisdictions that want to open or expand their drug courts but are unable to do so because of lack of treatment capacity. These jurisdictions should receive the funds they need to implement this innovative program. The Biden-Specter Drug Court Reathorization and Improvement Act provides \$75 million per year for this purpose.

Participating in the drug court program is not a soft alternative. If a drug court participant uses drugs while in the program, he or she goes to jail. Rather than just churning people through the revolving door of the criminal justice system, drug courts help these folks to get their lives together so they won't be back. When individuals graduate from drug court programs they are clean and sober and more prepared to participate in society. In order to graduate, they are required to finish high school or obtain a GED, hold down a job, keep up with financial obligations including drug court fees and child support payments. They are also required to have a sponsor who will keep them on track.

This program works. Columbia University's National Center on Addiction and Substance Abuse found that these courts are effective at taking offenders with little previous treatment history and keeping them in treatment; that they provide closer supervision than other community programs to which the offenders could be assigned; that they reduce crime; and that they are cost-effective. According to the Department of Justice, drug courts save at least \$5,000 per offender per year in prison costs alone. That says nothing of the cost savings associated with future crime prevention. Just as important, scarce prison beds are freed up for violent criminals.

Perhaps most importantly, two-thirds of drug court participants are parents of young children. After getting sober through the coerced treatment mandated by the court, many of these individuals are able to be real parents again. More than 500 drug-free babies have been born to female drug court participants, a sizable victory for society and the budget alike. Congress should reauthorize the drug court program and provide funds to communities to expand treatment capacity. It is time to invest in what works.

# Conclusion

Too often drug policy degenerates into a blame game of finger pointing. Policy makers need to stop finding scapegoats and start funding solutions -- like research on anti-addiction medications and expanding drug courts -- that have been proven effective.

The drug problem should be at the forefront of the national agenda; supply reduction, education, prevention and treatment should all be top priorities. The rise of heroin use -- especially among young people -- impacts all of us. We must act accordingly.

<sup>&</sup>lt;sup>111</sup>Steven Belenko, "Research on Drug Courts: A Critical Review," The National Center on Addiction and Substance Abuse at Columbia University, June 1998.